

In the Specification:

Please amend the Related Inventions section of the application at page 1, line 4 to page 2, line 4 as indicated below:

The present invention is related to the following commonly-assigned U. S. ~~Patents~~ Patent Applications, all of which were filed on September 19, 2001: U. S. _____ (serial number 09/955,788), "Building Distributed Software Services as Aggregations of Other Services"; U. S. _____ (serial number 09/956,268), "Programmatic Management of Software Resources in a Content Framework Environment"; and U. S. _____ (serial number 09/956,276), "Dynamic, Real-Time Integration of Software Resources through Services of a Content Framework". The present invention is also related to the following commonly-assigned U. S. Patent Application, which was filed on January 15, 2002: U. S. _____ (serial number 10/_____), "Provisioning Aggregated Services in a Distributed Computing Environment". These U. S. ~~Patents~~ Patent Applications are referred to herein as "the related inventions", and are hereby incorporated herein by reference. The latter patent application is referred to herein individually as "the provisioning invention".

Please amend the paragraph at page 5, line 1 to page 6, line 4 as indicated below:

Web services allow applications and services (referred to hereinafter as services for ease of reference) to interact with one another using web-based standards. The core set of standards on which web services work is being built includes HTTP ("Hypertext Transfer Protocol"), SOAP ("Simple Object Access Protocol") and/or XML ("Extensible Markup Language") Protocol, WSDL ("Web Services Description Language"), and UDDI ("Universal Description, Discovery, and Integration"). HTTP is commonly used to exchange

messages over TCP/IP (“Transmission Control Protocol/Internet Protocol”) networks such as the Internet. SOAP is an XML-based protocol used to send messages for invoking methods in a distributed environment. XML Protocol is an evolving specification of the World Wide Web Consortium (“W3C”) for an application-layer transfer protocol that will enable application-to-application messaging, and may converge with SOAP. WSDL is an XML format for describing distributed network services. UDDI is an XML-based registry technique with which businesses may list their services and with which service requesters may find businesses providing particular services. (For more information on SOAP, refer to “Simple Object Access Protocol (SOAP) 1.1, W3C Note 08 May 2000”, which is available on the Internet at the Internet address "<http://www.w3.org/TR/2000/NOTE-SOAP-20000508>." See the Internet address "<http://www.w3.org/2000/xp>" for more information on XML Protocol and the creation of an XML Protocol standard. The WSDL specification is titled “Web Services Description Language (WSDL) 1.1, W3C Note 15 March 2001”, and may be found on the Internet at the Internet address "<http://www.w3.org/TR/2001/NOTE-wsdl-20010315>." For more information on UDDI, refer to the UDDI specification which is entitled “UDDI Version 2.0 API Specification, UDDI Open Draft Specification 8 June 2001”, and which can be found on the Internet at the Internet address "<http://www.uddi.org/specification.html>." HTTP is described in Request For Comments (“RFC”) 2616 from the Internet Engineering Task Force, titled “Hypertext Transfer Protocol -- HTTP/1.1” (June 1999).)

Please amend the paragraph at page 24, line 24 to page 25, line 1 as indicated below:

As discussed in the related inventions, creating a WSDL document may be performed by a human user or using programmatic operations, or a combination thereof. For example, the human user might may be asked to supply information such as the port type name, the location of the name space information, and so forth, while programmatic operations generate <operation> and <message> elements for a software resource's public methods. IBM's WSTK is an example of a commercially-available product which may be used to programmatically generate WSDL for an existing software resource. See "The Web services (r)evolution: Part 4, Web Services Description Language (WSDL)", G. Glass (Feb. 2001), published by IBM on the Internet at the Internet address "http://www-106.ibm.com/developerworks/webservices/library/ws-peer4", which presents an example of programmatically generating a WSDL document for a simple weather service which has "getTemp" and "setTemp" operations.

Please amend the paragraph at page 25, lines 13-19 as indicated below:

Preferably, WSFL is leveraged for this directed graph support. In particular, WSFL's persistent storage techniques and run-time evaluation techniques using directed graphs may be added to a web services stack to operate upon the graphs created by a service composer. For a detailed discussion of WSFL, refer to the WSFL specification, which is entitled "Web Services Flow Language (WSFL 1.0)", Prof. Dr. F. Leymann (May 2001), available on the Internet from IBM at the Internet address "http://www-4.ibm.com/software/solutions/webservices/pdf/WSFL.pdf", which is hereby incorporated herein by reference as if set forth fully.

Please amend the paragraph at page 31, lines 6-15 as indicated below:

Blocks 500 and 510 therefore expose services and business processes as portlets having a presentation interface, in addition to their prior art transaction-oriented or data-oriented interfaces. This is preferably achieved by leveraging the Portlet API of the prior art, whereby each of the defined portlets supports the methods of the Portlet API and thus has a visual aspect. (For an explanation of how multiple transaction-oriented interfaces into an individual, non-aggregated service can be provided as different views using mode indicators -- such as whether the portlet is being invoked in Help mode, Configuration mode, Edit mode, or normal View mode -- using prior art techniques, see "Introduction to portlet structure and programming", D. Lection, which was published by IBM on the Internet at ~~location~~ the Internet address "<http://www-106.ibm.com/developerworks/library/i-portal>" (~~November 2001~~).)

Please amend the paragraph at page 32, lines 12-15 as indicated below:

An example illustrating this usage of the XLinking language is shown in Fig. 6. The XLinking language is defined in "XML Linking Language (XLink) Version 1.0, W3C Recommendation 27 June 2001", which may be found on the Internet at ~~location~~ the Internet address "<http://www.w3.org/TR/xlink/>."